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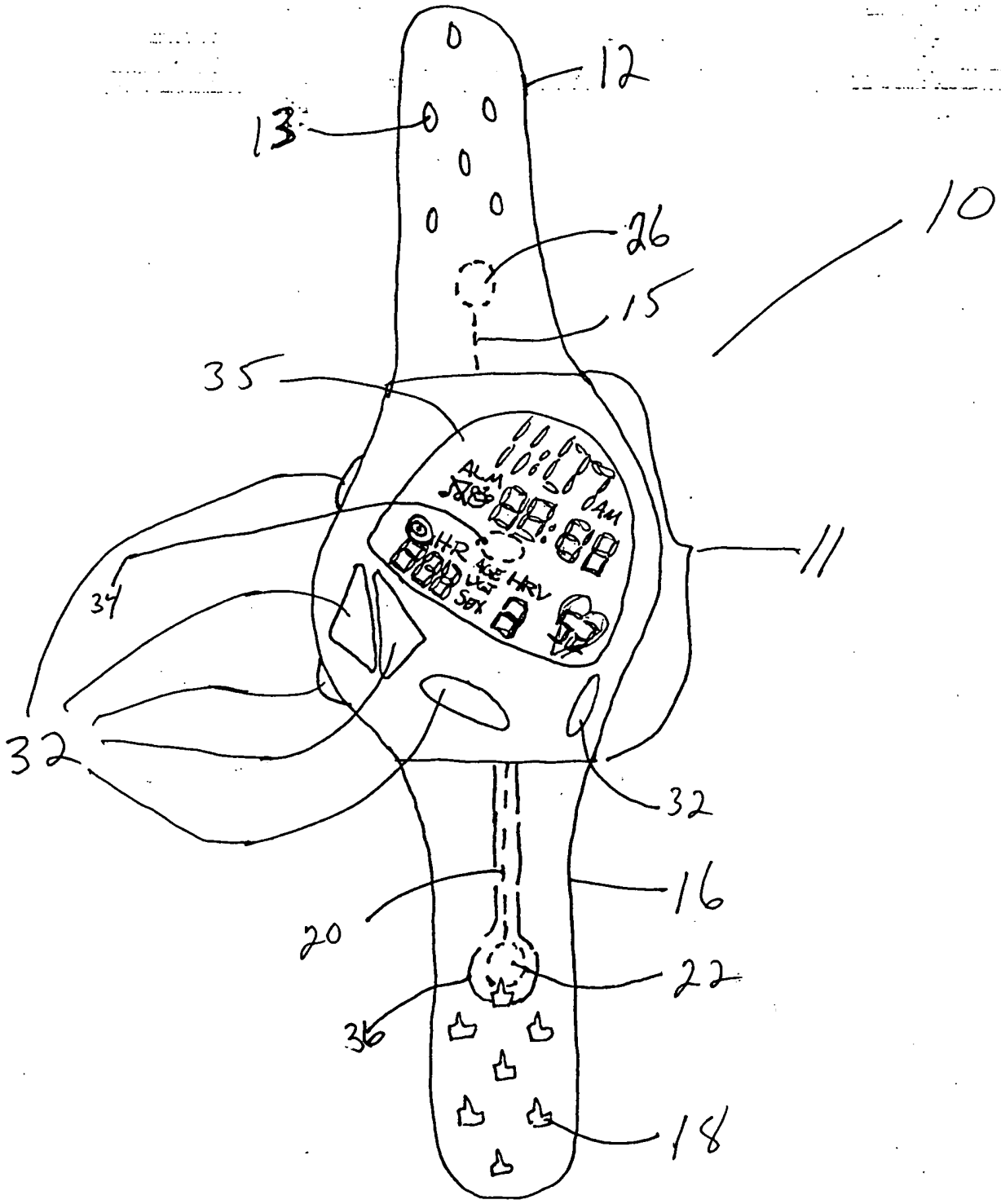

FIG 1

Back of the device/watch

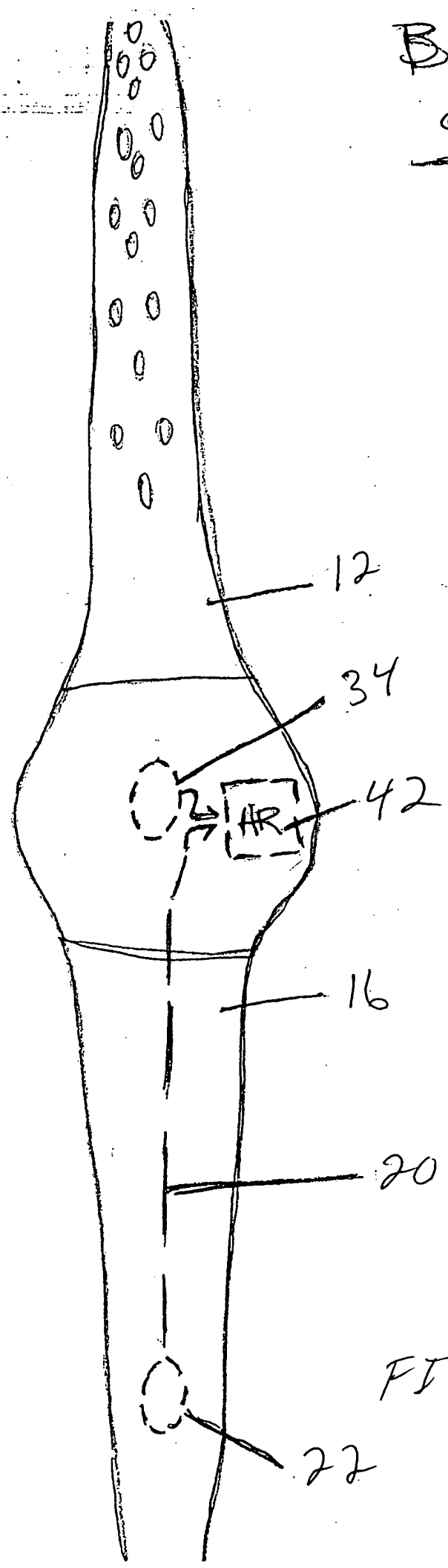

FIG 2

CONFIDENTIAL
FILE

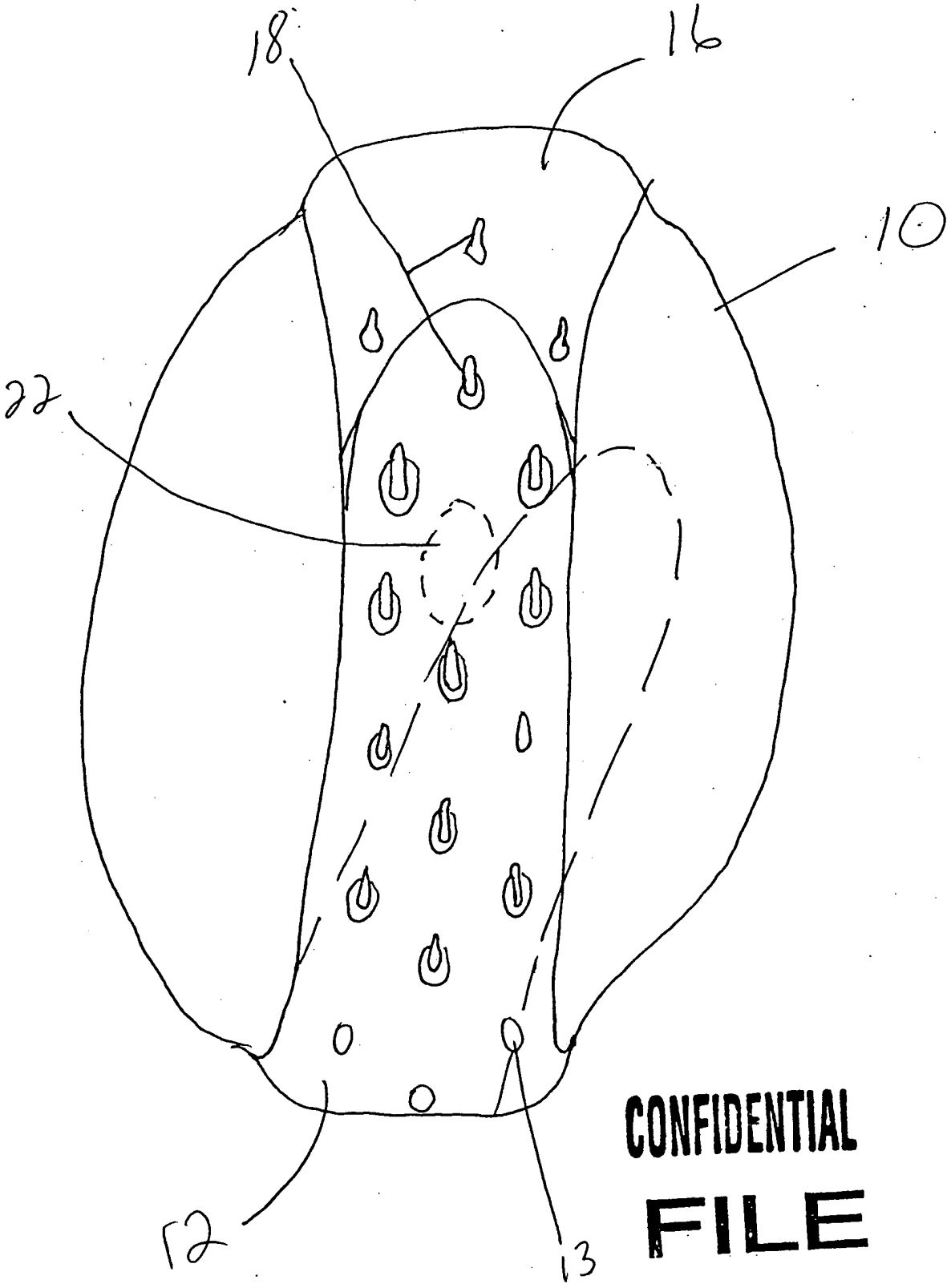

FIG 3

CONFIDENTIAL
FILE

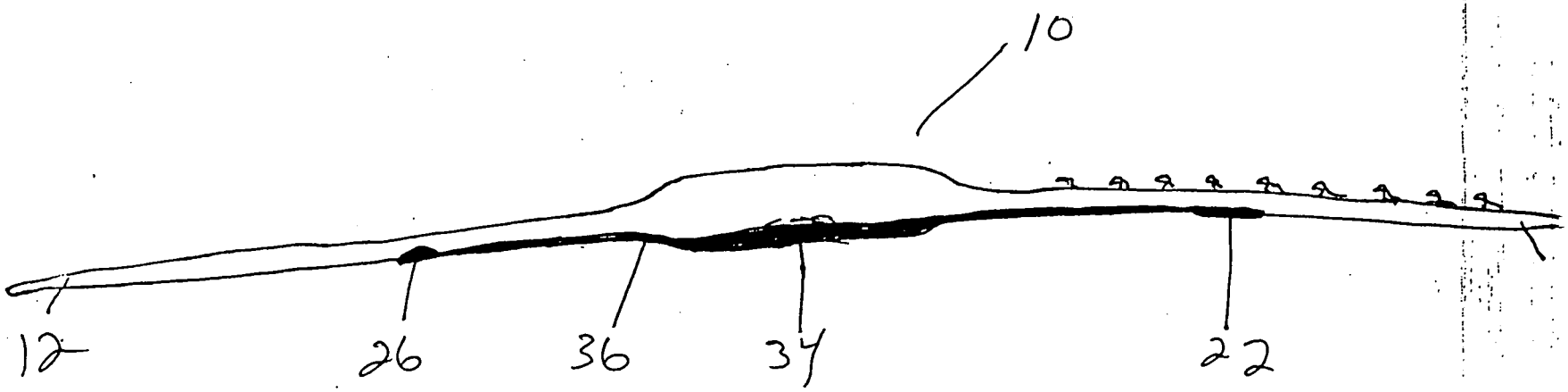

FIG 4

CONFIDENTIAL

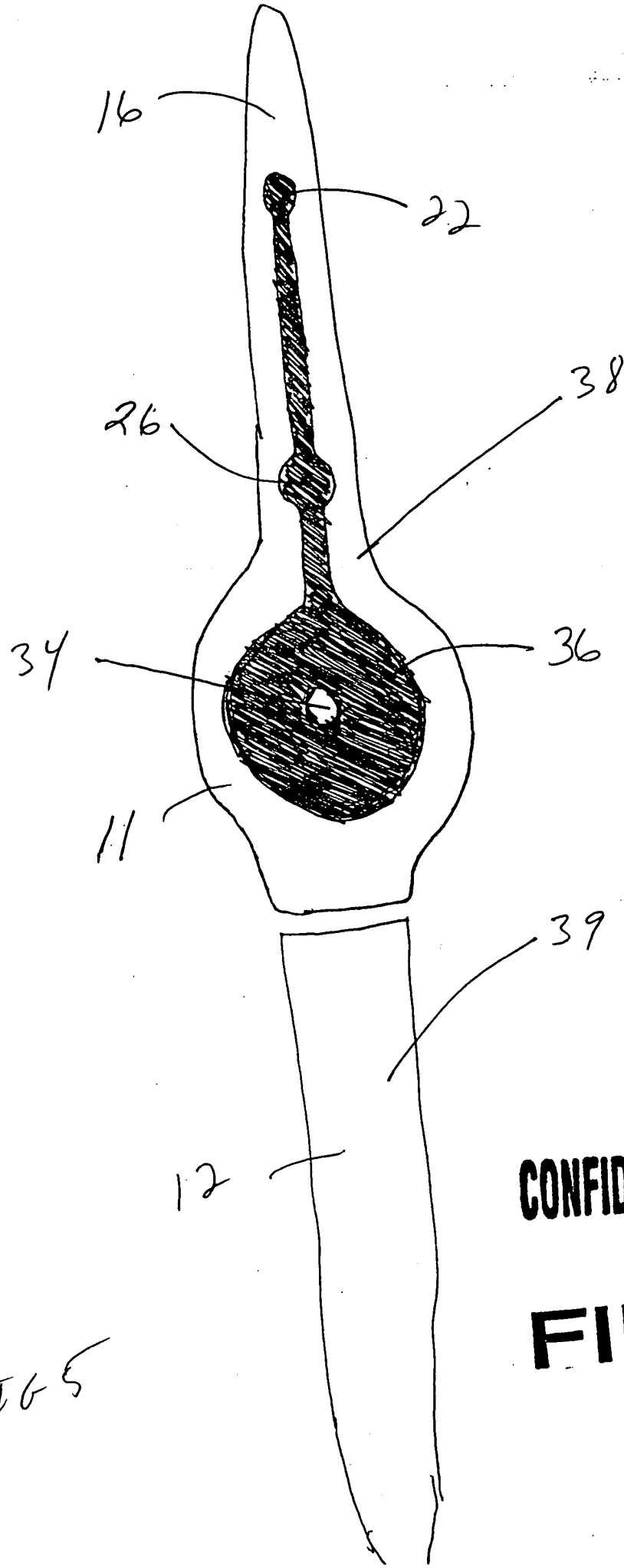

FIG 5

CONFIDENTIAL

FILE

Fig 11d

CONFIDENTIAL FILE

CONFIDENTIAL
FILE

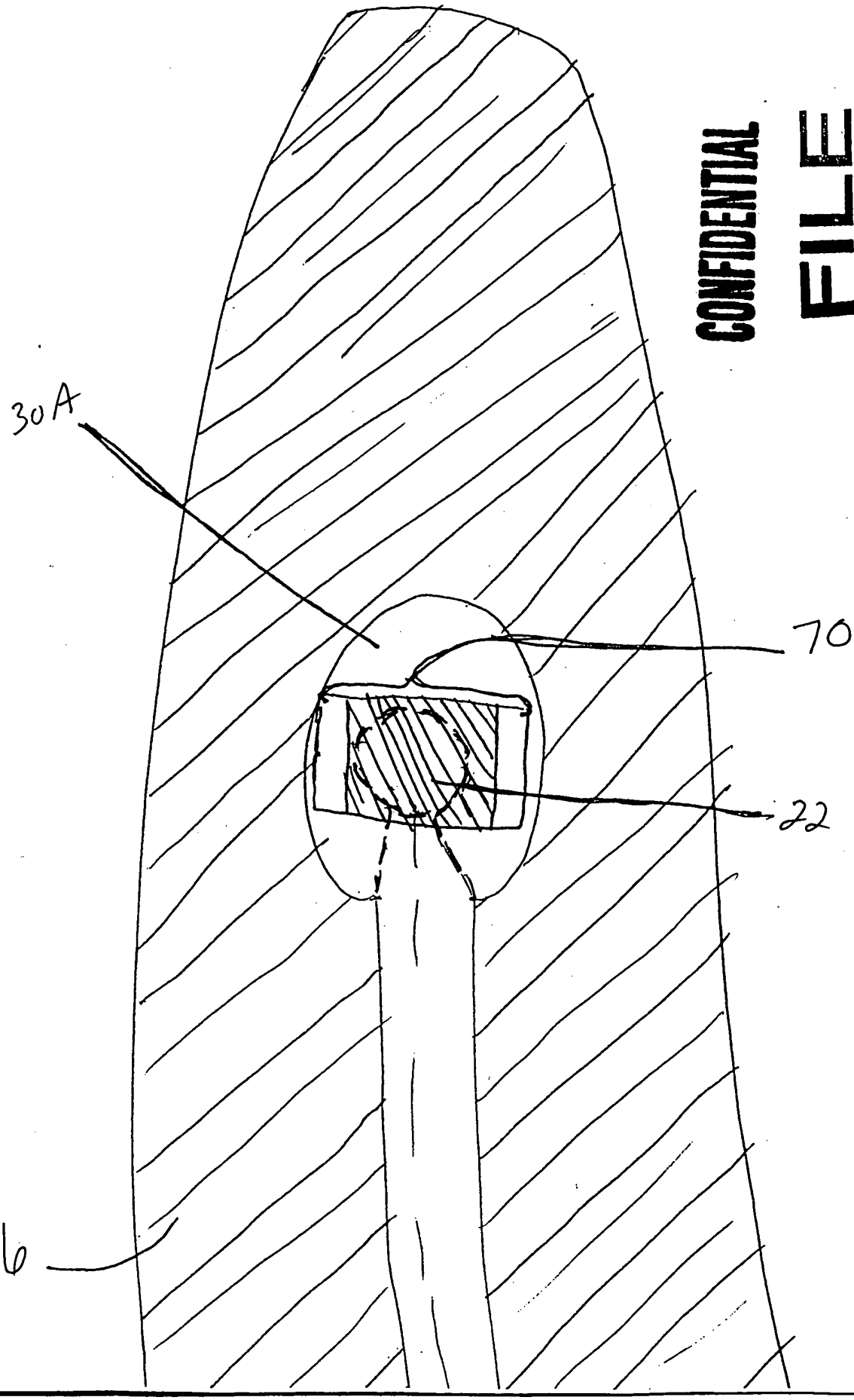

FIG 7

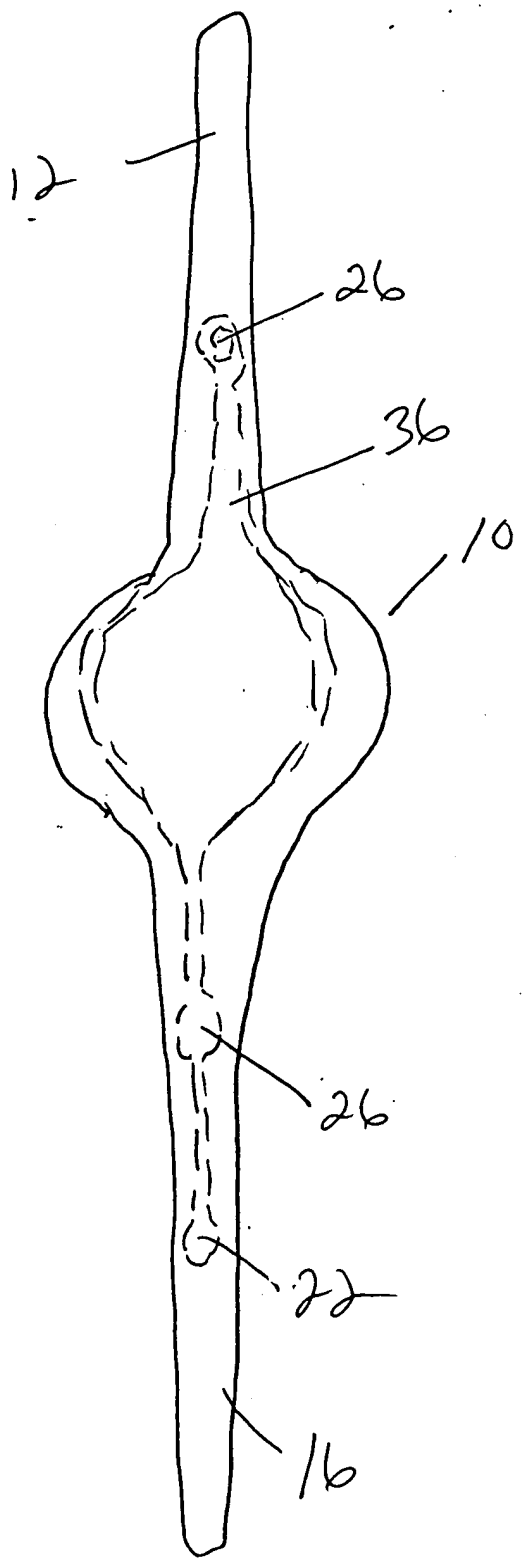

FIG 8A

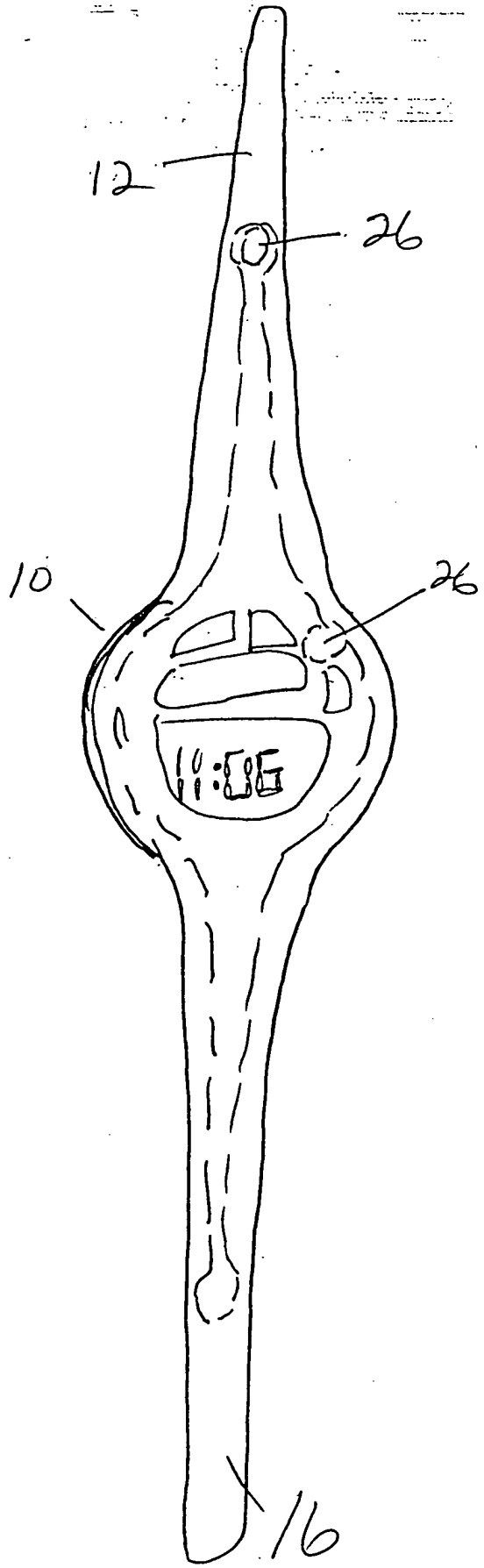

FIG 8B

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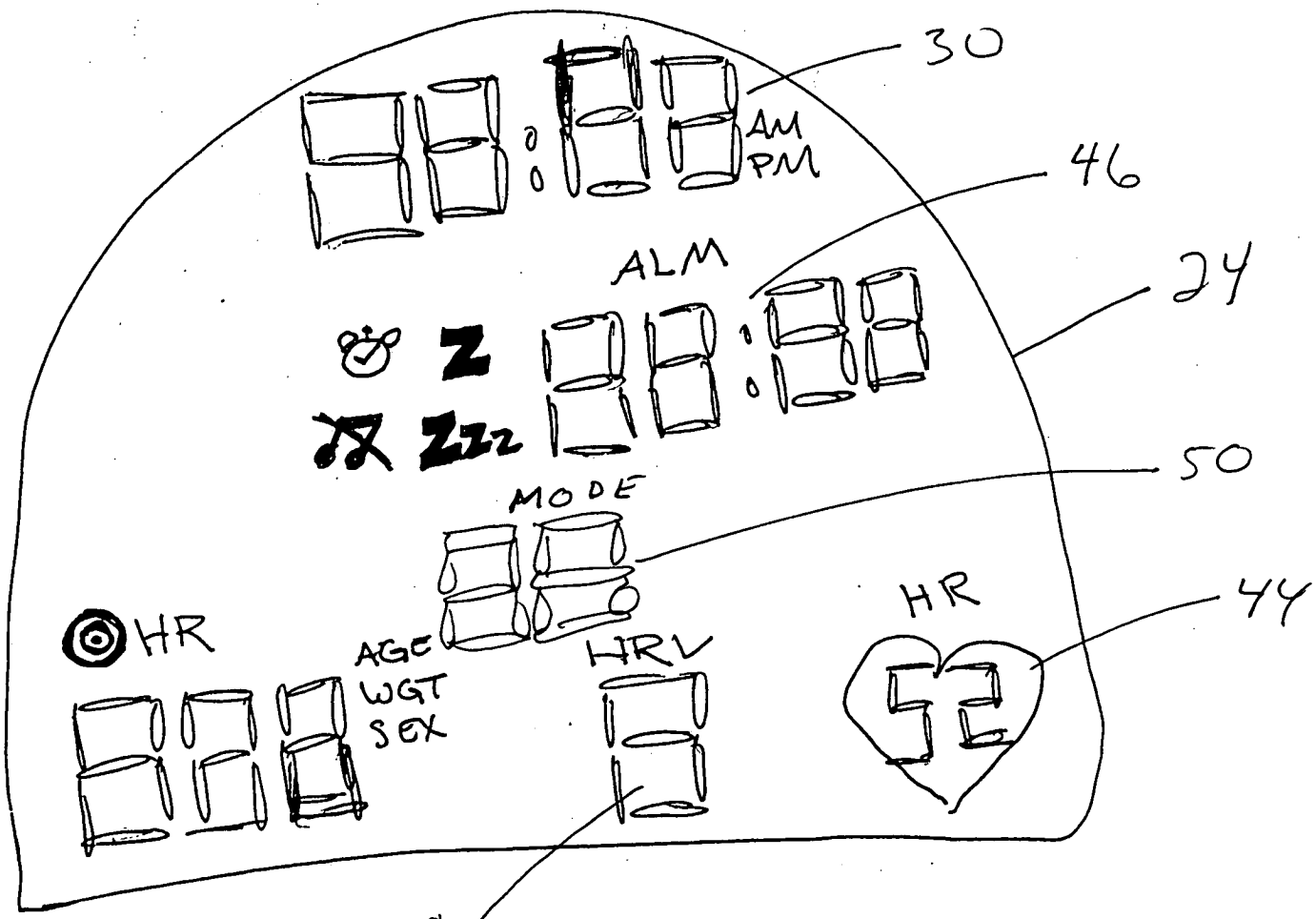
FILE



CONFIDENTIAL FILE

FIG 9

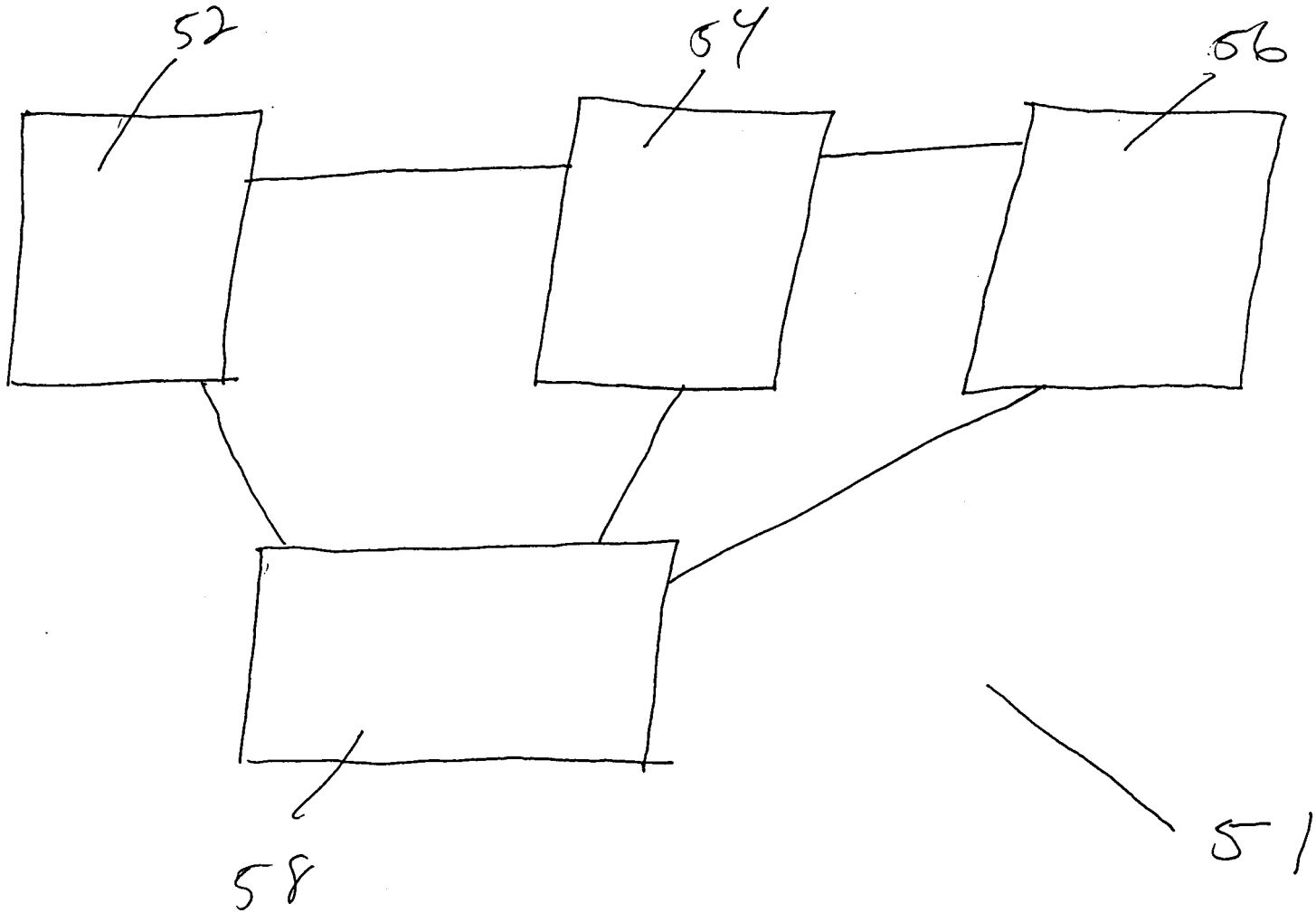


FIG 10

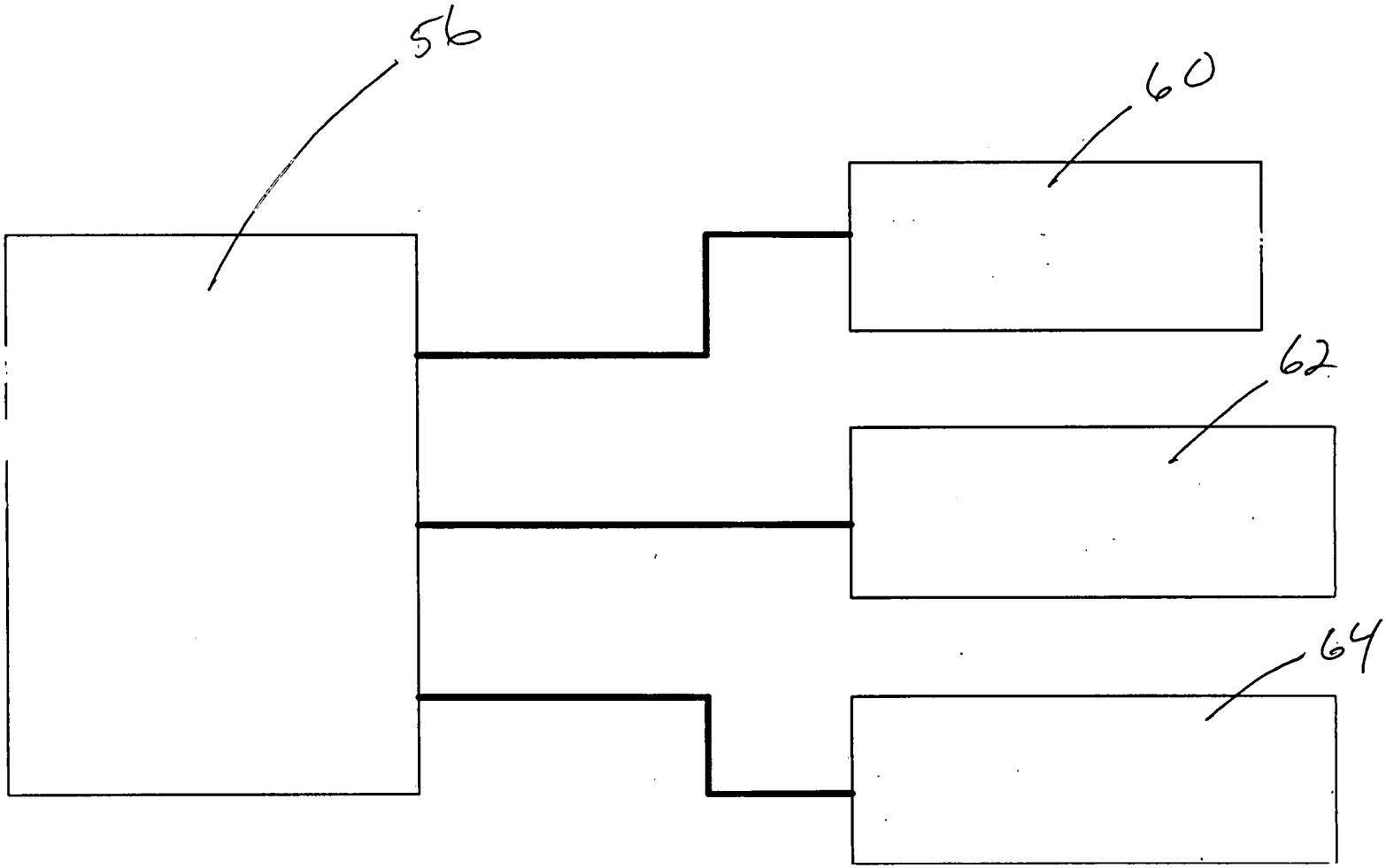


FIG 11

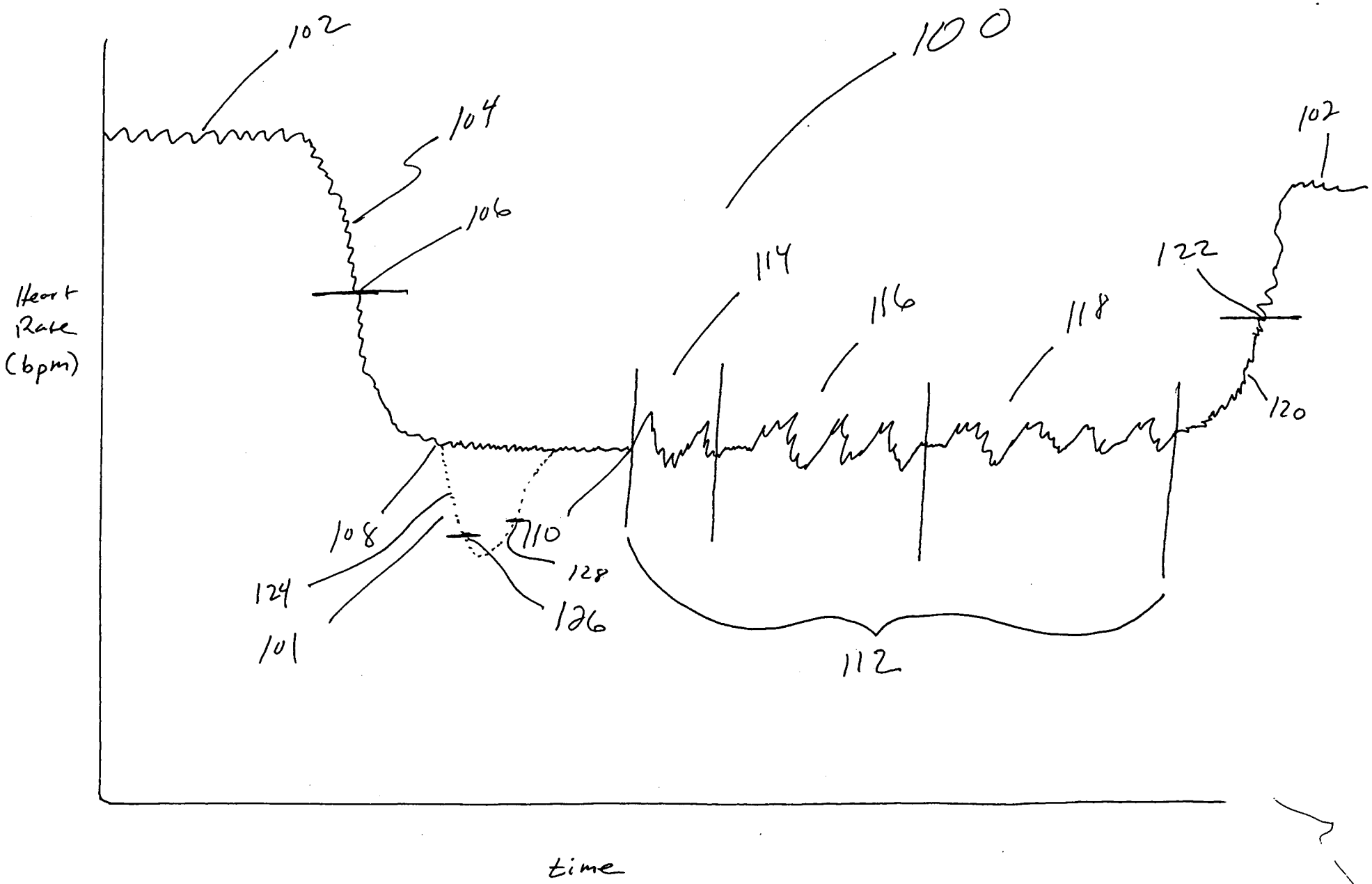

100
102
104
106
102
114
116
118
122
120
Heart Rate (bpm)
108
110
124
128
126
101
112
time

FIG-12

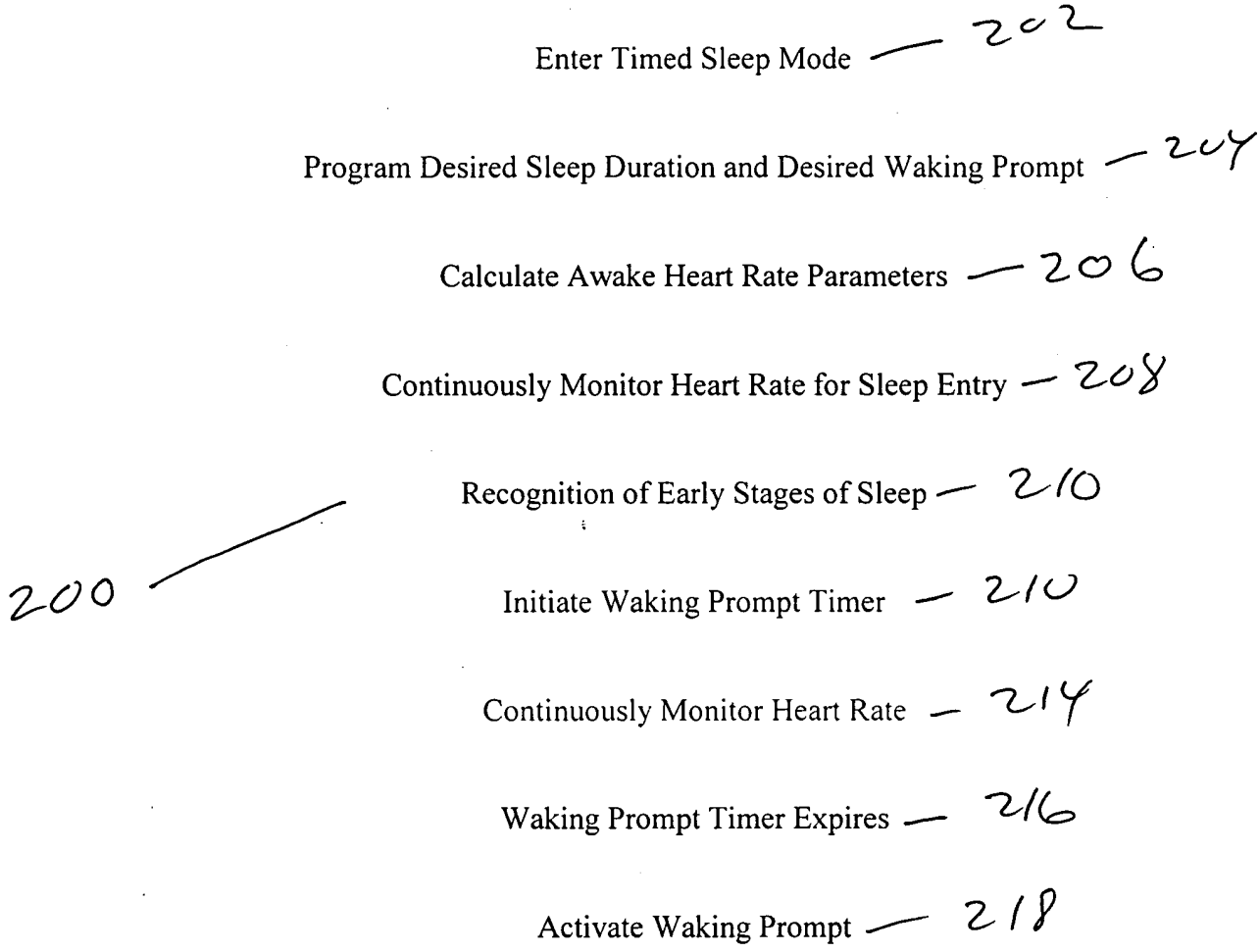

Enter Timed Sleep Mode 202
Program Desired Sleep Duration and Desired Waking Prompt 204
Calculate Awake Heart Rate Parameters 206
Continuously Monitor Heart Rate for Sleep Entry 208
Recognition of Early Stages of Sleep 210
200
Initiate Waking Prompt Timer 210
Continuously Monitor Heart Rate 214
Waking Prompt Timer Expires 216
Activate Waking Prompt 218

FIG 13

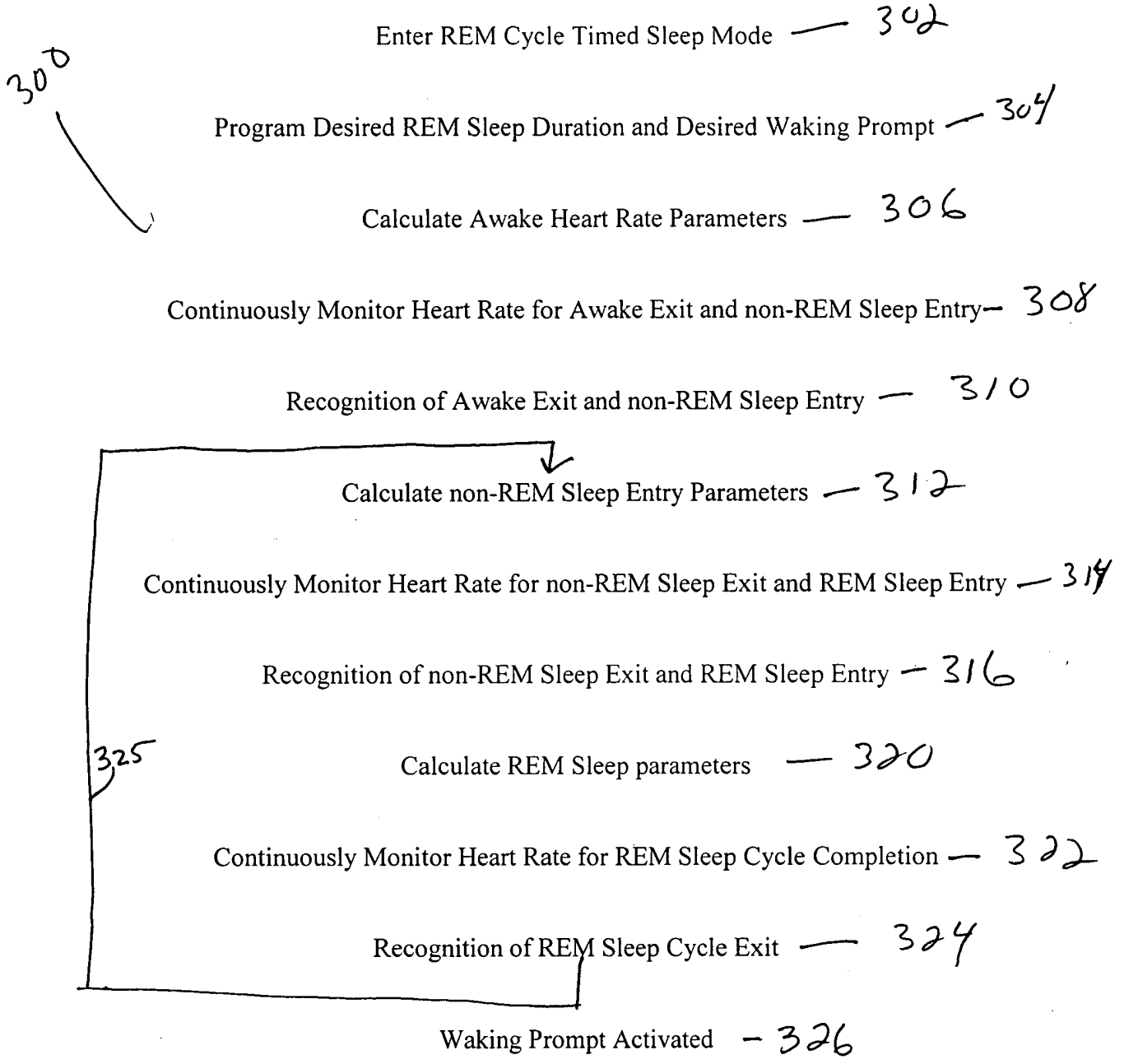

300
Enter REM Cycle Timed Sleep Mode — 302
Program Desired REM Sleep Duration and Desired Waking Prompt — 304
Calculate Awake Heart Rate Parameters — 306
Continuously Monitor Heart Rate for Awake Exit and non-REM Sleep Entry — 308
Recognition of Awake Exit and non-REM Sleep Entry — 310
Calculate non-REM Sleep Entry Parameters — 312
Continuously Monitor Heart Rate for non-REM Sleep Exit and REM Sleep Entry — 314
Recognition of non-REM Sleep Exit and REM Sleep Entry — 316
325
Calculate REM Sleep parameters — 320
Continuously Monitor Heart Rate for REM Sleep Cycle Completion — 322
Recognition of REM Sleep Cycle Exit — 324
Waking Prompt Activated — 326

FIG 14

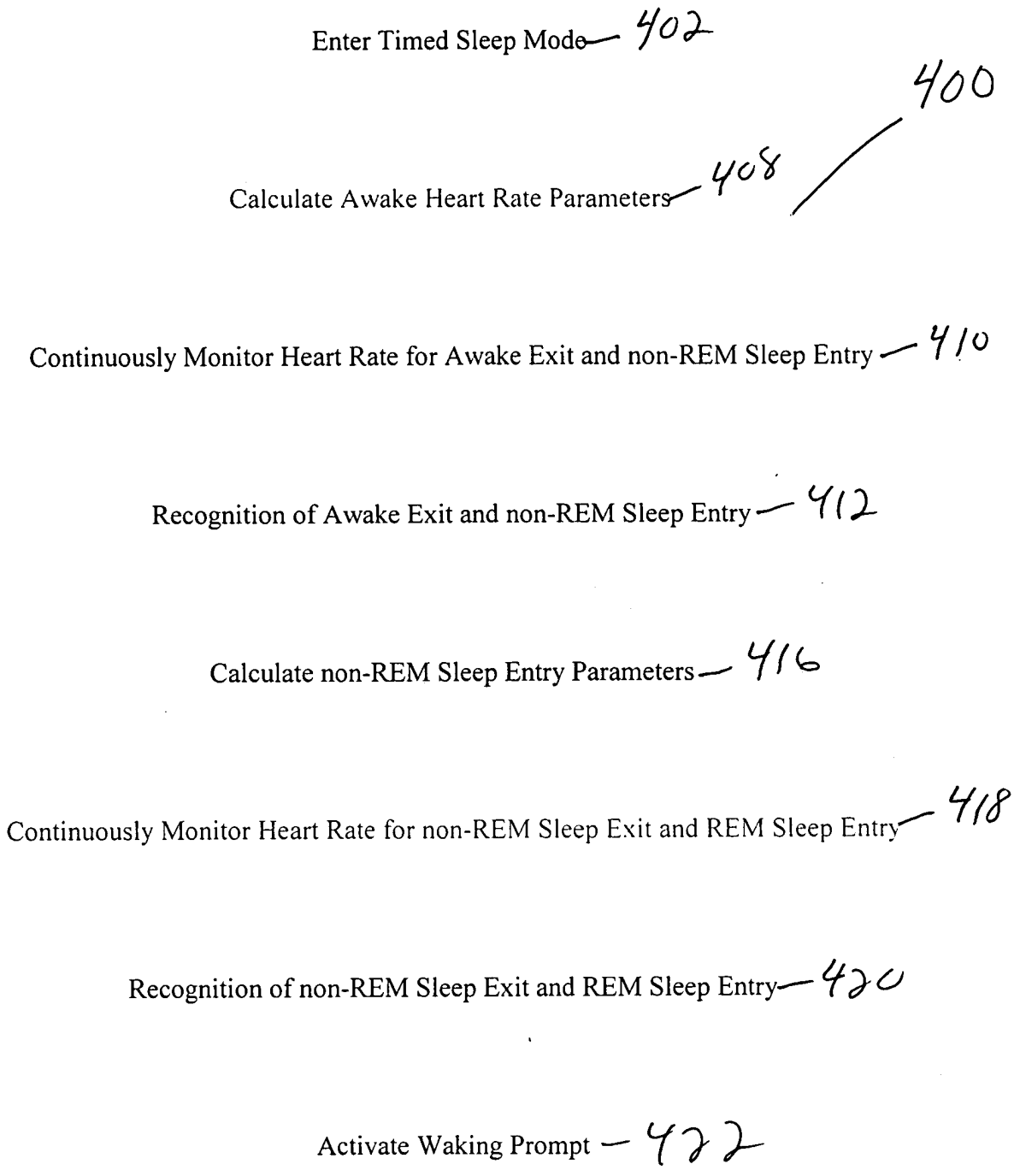

Enter Timed Sleep Mode
402
400
Calculate Awake Heart Rate Parameters
408
Continuously Monitor Heart Rate for Awake Exit and non-REM Sleep Entry
410
Recognition of Awake Exit and non-REM Sleep Entry
412
Calculate non-REM Sleep Entry Parameters
416
Continuously Monitor Heart Rate for non-REM Sleep Exit and REM Sleep Entry
418
Recognition of non-REM Sleep Exit and REM Sleep Entry
420
Activate Waking Prompt
422

FIG 15

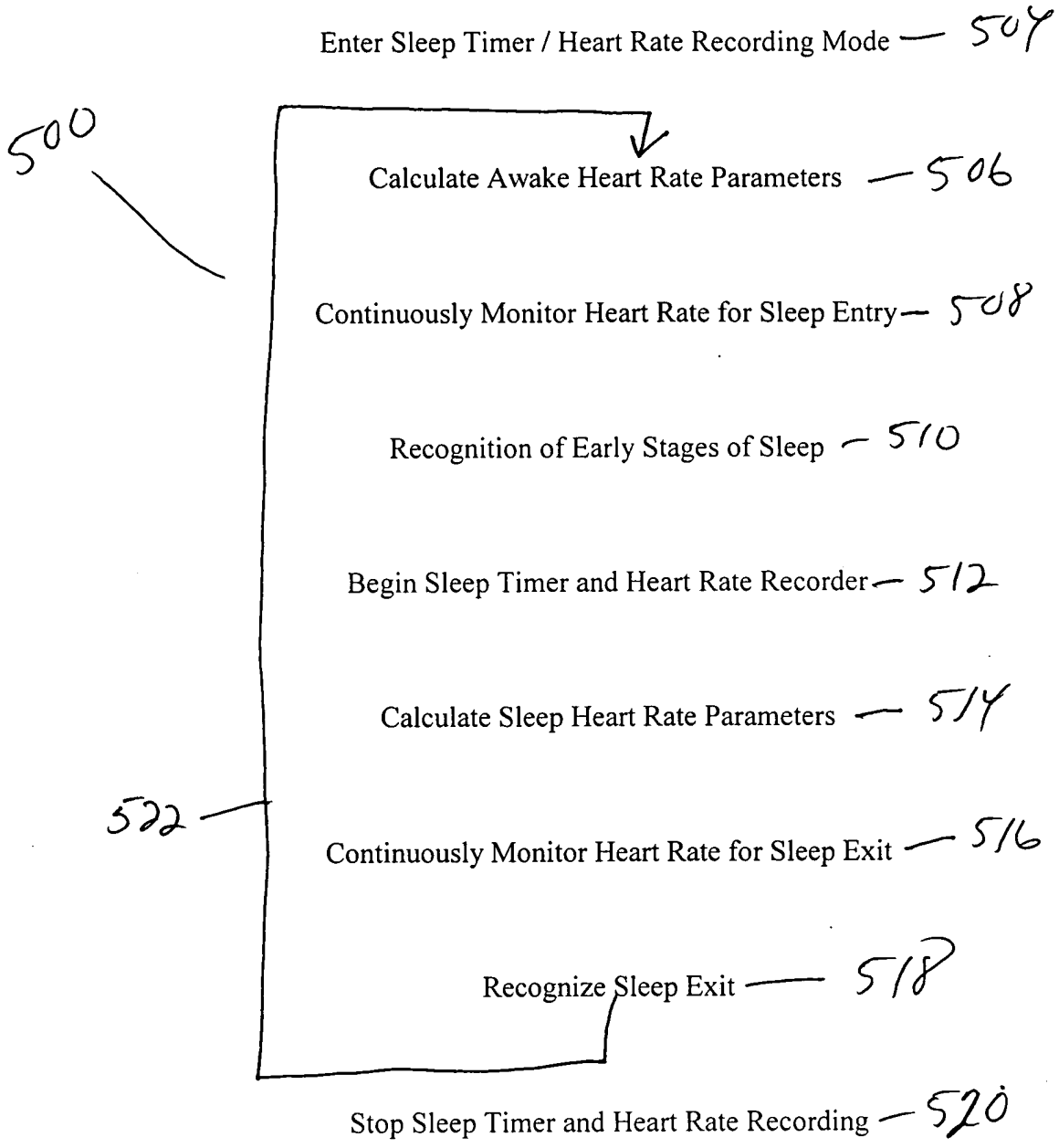

Enter Sleep Timer / Heart Rate Recording Mode
504
500
Calculate Awake Heart Rate Parameters
506
Continuously Monitor Heart Rate for Sleep Entry
508
Recognition of Early Stages of Sleep
510
Begin Sleep Timer and Heart Rate Recorder
512
Calculate Sleep Heart Rate Parameters
514
522
Continuously Monitor Heart Rate for Sleep Exit
516
Recognize Sleep Exit
518
Stop Sleep Timer and Heart Rate Recording
520

FIG 16

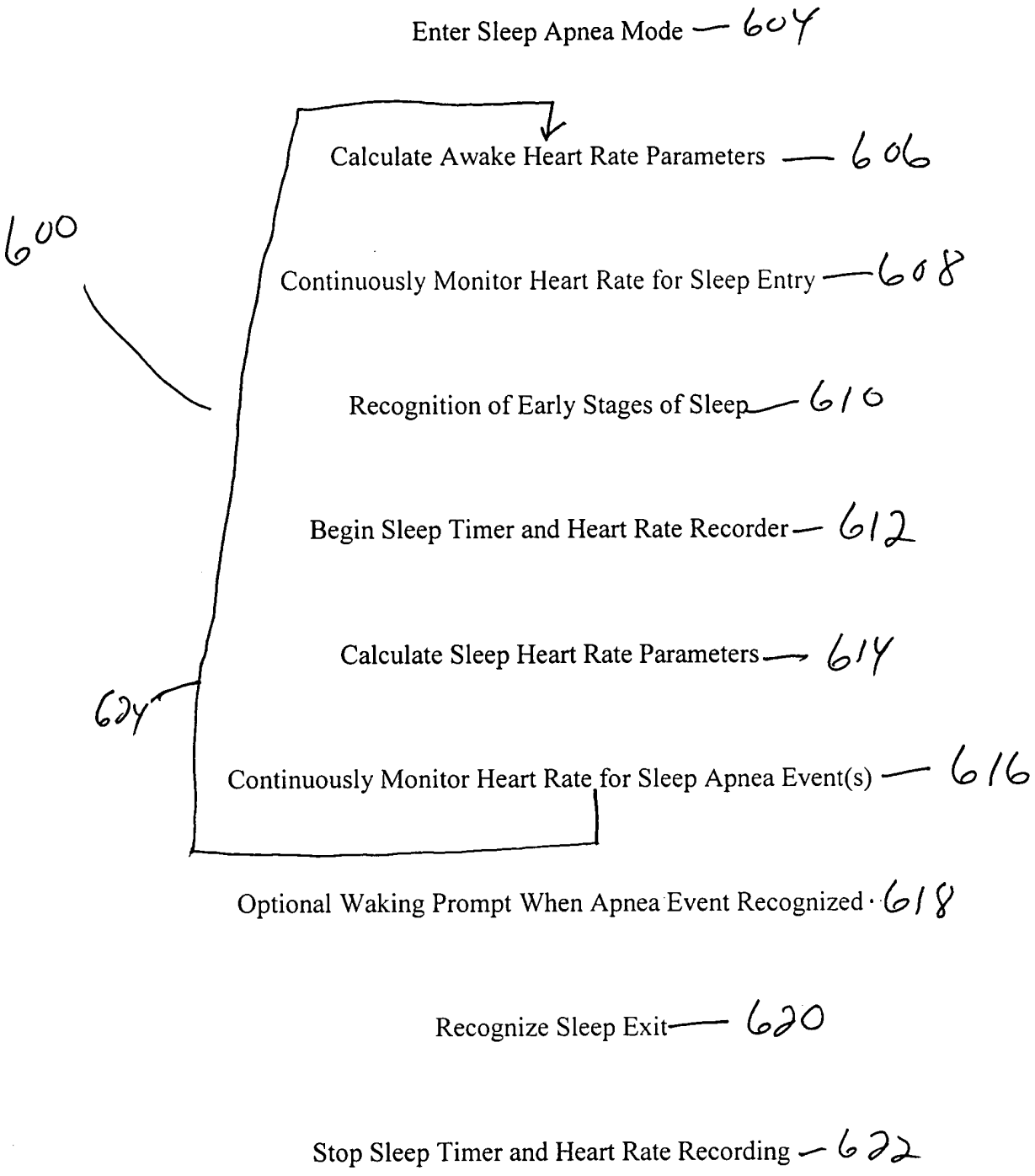
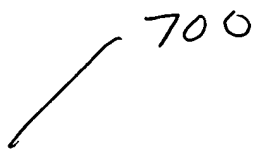

Enter Sleep Apnea Mode — 604
Calculate Awake Heart Rate Parameters — 606
600
Continuously Monitor Heart Rate for Sleep Entry — 608
Recognition of Early Stages of Sleep — 610
Begin Sleep Timer and Heart Rate Recorder — 612
Calculate Sleep Heart Rate Parameters — 614
624
Continuously Monitor Heart Rate for Sleep Apnea Event(s) — 616
Optional Waking Prompt When Apnea Event Recognized · 618
Recognize Sleep Exit — 620
Stop Sleep Timer and Heart Rate Recording — 622

FIG 17



Integrate Heart Rate Monitor With Home Control Unit and Central Home Computer — 702

Enter Remote Home Control Mode — 704

Home in Wake Mode — 708

Calculate Awake Heart Rate Parameters — 710

Continuously Monitor Heart Rate for Sleep Entry — 712

Recognition of Early Stages of Sleep — 714

Transmit Signal to Home Control Receiver(s) and, in turn, to Central Home Computer — 716

Central Home Computer Places Home in Sleep Mode — 718

Calculate Sleep Heart Rate Parameters — 720

Continuously Monitor Heart Rate for Sleep Exit — 722

Recognize Sleep Exit — 724

Transmit Wake Signal to Home Control Receiver(s) and, in turn, to Central Home Computer — 726

Central Home Computer Places Home in Wake Mode — 728

FIG 18